

REMARKS

These remarks are in response to the most final Office Action mailed December 30, 2003 (hereinafter referred to as "the Final Office Action"). At the time of examination of the Final Office Action, Claims 1-15, 17-20, 22, 24 and 25 were pending. There are no amendments may by this response. Accordingly, these claims remain pending. The pending claims are rejected either under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,427,161 issued to LiVecchi (hereinafter referred to simply as "LiVecchi") or under 35 U.S.C. § 103(a) as being unpatentable over LiVecchi in view of U.S. Patent Publication No. 2001/0029548 applied for in the name of Srikantan et al. (hereinafter referred to simply as "Srikantan"). The undersigned respectfully requests reconsideration in light of these remarks.

As a preliminary matter, the Examiner is correct in stating that there was no Examiner Interview performed on October 6, 2003. Applicants' representative prepared the response prior to the scheduled Examiner interview, and inadvertently left the reference to the Examiner Interview in the response even through the Examiner Interview did not ultimately occur. The undersigned apologizes for any misunderstanding regarding scheduling.

Method claims 1 and 24 are generally directed to a method (and an associated computer program product, e.g. claim 17, for implementing the method) of a server reducing denials of service even though the server is experiencing a denial of service attack. As recited, the server receives connection requests, establishes a connection socket for one or more of those connection requests without putting that connection request into a backlog queue. For those connection requests for which the server cannot currently establish a connection socket, the connection request is placed in the backlog queue without establishing a connection socket for the time being. The backlog queue includes connection requests without regard for whether or not the connection request includes associated request data. Upon determining that the backlog queue is being used, the server identifies any connections sockets that have no received request data, and disconnects those identified connection sockets.

The pending claims are neither anticipated by nor made obvious by the art of record. In particular, LiVecchi and Srikantan neither anticipate or nor make obvious the pending claims, either singly or in combination.

In contrast to the pending claims, LiVecchi is directed towards thread scheduling techniques for multithreaded servers (LiVecchi, Title), and is not directed towards countering

denial of service attacks. Accordingly, there are numerous features of Claims 1, 17 and 24 that are naturally not disclosed by LiVecchi.

The final Office Action asserts that Column 13, lines 15-46 of LiVecchi teaches that "for each connection request for which the server computer system cannot currently establish a connection socket, placing the connection request in the backlog queue without then establishing a connection socket, wherein the backlog queue includes connection requests without regarding for whether or not the connection request includes associated request data". However, this is not true, especially when reading the passage in its proper context. For instance, LiVecchi describes a first preferred embodiment of their invention from Column 10, line 48 through Column 15, line 36. The passage cited by the Examiner falls within this range and appears to be detailing aspects of the first preferred embodiment.

With respect to the first preferred embodiment, LiVecchi states that "[i]n order to differentiate accepted connections which have not received data from those that have, a 2-stage queue is defined" (LiVecchi, Col. 11, lines 10-12). The first stage is referred to as the "accepted connections queue" (LiVecchi, Col. 11, line 16). Once a data packet arrives for that connection, the connection is moved to the second stage referred to as the "ready queue" (see LiVecchi, Col. 11, lines 16-18). Thus, connections in the "accepted connections queue" do not have associated data, and connections in the "ready connections queue" do have associated data. The passage referred to by the Office Action discusses a "small backlog [that is] maintained on the incoming ready queue" (LiVecchi, Col. 13, lines 18-19). In contrast, independent Claims 1, 17, and 24 recite that a "backlog queue includes connection requests without regard for whether or not the connection request includes associated request data". Accordingly, the backlog referred to in Col. 13 does not have the same characteristics as the recited backlog queue of Claim 1.

Furthermore, the Final Office Action indicated the passage from Column 15, line 67 to Column 16 line 67 describes that "in response to the determination [that the backlog queue is being used], identifying any connection sockets that have no received request data; and disconnecting the identified connection sockets" with respect to Claims 1 and 17, and a similar recitation with respect to Claim 24. However, this is also not true. The undersigned has reviewed the passage in question numerous times, and has found no reference to any description that connection sockets are identified as having no request data or that any identified connection sockets are disconnected. The undersigned respectfully requests clarification if this passage is

continued to be asserted as relevant to the claim language. Furthermore, even if the passage does disclose the identification of connection sockets that have no received request data, there is no indication that this is done in response to any determination "that a backlog queue is being used". There is simply no indication of this in the cited passage.

Srikantan is directed towards a mechanism for handling events received at a server socket (Srikantan, Title). However, Srikantan does not describe the use of a backlog queue that includes connection requests without regard for whether or not the connection request includes associated request data as recited in Claims 1, 17 and 24. Furthermore, Srikantan does not describe that in response to a determination that a backlog queue is being used, any connection sockets that have no received request data are identified and disconnected as recited in Claims 1, 17 and 24.

Accordingly, even if combined, LiVecchi and Srikantan do not teach or suggest independent Claims 1, 17 or 24. Furthermore, LiVecchi and Srikantan do not teach or suggest any of their associated dependent claims for at least the reasons provided above. Accordingly, favorable action is requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 30th day of March, 2004.

Respectfully submitted,



ADRIAN J. LEE
Registration No. 42,785
Attorney for Applicants
Customer No. 022913